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JR

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Scott R. Johnson et al.

Application No.: 10/782,807

Filing Date: February 23, 2004

Title: INK FORM ROLLER DRIVE FOR IMPROVING PRINTING QUALITY

Group Art Unit: 2854

Examiner: ANTHONY H NGUYEN

Confirmation No.: 5459

AMENDMENT/REPLY TRANSMITTAL LETTER

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Enclosed is a reply for the above-identified patent application.

☐ A Petition for Extension of Time is also enclosed.

☐ Terminal Disclaimer(s) and the ☐ \$65.00 (2814) ☐ \$130.00 (1814) fee per  
Disclaimer due under 37 C.F.R. § 1.20(d) are also enclosed.

☐ Also enclosed is/are \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

☐ Small entity status is hereby claimed.

☐ Applicant(s) requests continued examination under 37 C.F.R. § 1.114 and enclose the  
☐ \$395.00 (2801) ☐ \$790.00 (1801) fee due under 37 C.F.R. § 1.17(e).

☐ Applicant(s) requests that any previously unentered after final amendments not be entered.  
Continued examination is requested based on the enclosed documents identified above.

☐ Applicant(s) previously submitted \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ on \_\_\_\_\_  
for which continued examination is requested.

☐ Applicant(s) requests suspension of action by the Office until at least \_\_\_\_\_,  
which does not exceed three months from the filing of this RCE, in accordance with 37 C.F.R.  
§ 1.103(c). The required fee under 37 C.F.R. § 1.17(i) is enclosed.

☐ A Request for Entry and Consideration of Submission under 37 C.F.R. § 1.129(a) (1809/2809) is also  
enclosed.

**Buchanan Ingersoll PC**  
ATTORNEYS

Including attorneys from Burns Doane Swecker & Mathis

- ☒ No additional claim fee is required.
- ☐ An additional claim fee is required, and is calculated as shown below.

AMENDED CLAIMS					
	No. of Claims	Highest No. of Claims Previously Paid For	Extra Claims	Rate	Additional Fee
Total Claims	24	MINUS 24 =	0	x \$50.00 (1202) =	\$ 0.00
Independent Claims	3	MINUS 3 =	0	x \$200.00 (1201) =	\$ 0.00
If Amendment adds multiple dependent claims, add \$360.00 (1203)					
Total Claim Amendment Fee					\$ 0.00
<input type="checkbox"/> Small Entity Status claimed - subtract 50% of Total Claim Amendment Fee					\$ 0.00
<b>TOTAL ADDITIONAL CLAIM FEE DUE FOR THIS AMENDMENT</b>					<b>\$ 0.00</b>

- ☐ A check in the amount of \_\_\_\_\_ is enclosed for the fee due.
- ☐ Charge \_\_\_\_\_ to Deposit Account No. 02-4800.
- ☐ Charge \_\_\_\_\_ to credit card. Form PTO-2038 is attached.

The Director is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17, 1.20(d) and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800. This paper is submitted in duplicate.

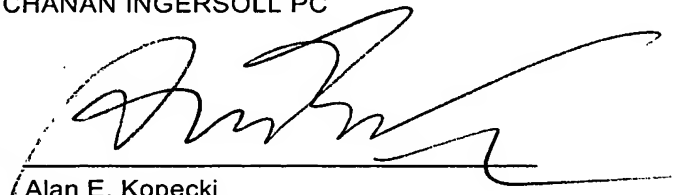
Respectfully submitted,

BUCHANAN INGERSOLL PC

P.O. Box 1404  
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Date: March 7, 2006

By



Alan E. Kopecki  
Registration No. 25,813



Patent  
Attorney's Docket No. 1008608-000028

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of	)	<b>MAIL STOP / AF</b>
Scott R. Johnson et al.	)	Group Art Unit: 2854
Application No.: 10/782,807	)	Examiner: ANTHONY H NGUYEN
Filed: February 23, 2004	)	Confirmation No.: 5459
For: INK FORM ROLLER DRIVE FOR	)	
IMPROVING PRINTING QUALITY	)	

**REQUEST FOR RECONSIDERATION**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In response to the Official Action dated December 16, 2005, applicant requests reconsideration of the present application.

The present invention relates to printing methods and apparatus in which the removal of hickeys from a plate cylinder is greatly facilitated. In particular, the invention involves utilizing a variable speed servo motor for directly driving an ink form roller that makes contact with the plate cylinder, so that a surface speed differential occurs between the contacting surfaces of the ink form roller and the plate cylinder. As a result of that surface speed differential, the ink form roller is able to dislodge hickeys from the sticky ink layer on the plate cylinder. By utilizing an ink form roller to do this, the tacky quality of ink on the ink form roller causes hickeys to adhere thereto, thus aiding in breaking the bond between the hickeys and the ink film on the plate cylinder.

Importantly, the speed differential between the form roller and the plate cylinder should be closely controllable and constant in order to obtain suitable and predictable results. That is achieved by the direct drive between the variable speed servo motor and the form roller which, unlike the applied prior art references, does not rely on friction in establishing the speed of the form roller.

Each of claims 1, 15 and 19 recites a direct drive between a variable speed servo motor and an ink form cylinder which contacts a plate cylinder. Nowhere is such a combination disclosed or taught by either Garner et al. or Eltner. Garner et al. does not disclose the use of a variable speed servo motor. Garner et al. mainly discloses to remove hickeys by creating a surface speed differential between the plate cylinder 13 and a damping roller 21 (see the sentence bridging columns 5 and 6). While Garner et al. does make passing reference to a possible surface speed differential between the plate cylinder and an ink form roller 17a (column 6, lines 6-9), that surface speed differential is not achieved in the presently claimed manner, and it would not have been obvious to do so for the following reason.

The ink form rollers 17, 17a of Garner et al. are driven by frictional inputs from both the vibrating roller 19 and the plate cylinder 13 (column 3, lines 62-67). That is, each of the ink form rollers 17, 17a receives a frictional drive force from the plate cylinder, and a frictional drive force from the vibrating roller. If the surface speeds of the plate cylinder and the vibrating roller 19 are the same, then the form rollers will rotate at a predictable constant speed. However, any attempt to create a surface speed differential between the plate cylinder 19 and the ink form rollers 17, 17a by changing the speed of the vibrating roller would result in competing frictional forces

acting on the ink form roller, resulting in an inconsistent, unpredictable surface speed differential. Those shortcomings would become even more pronounced as the outer surface of the ink form roller gradually wears, causing its coefficient of friction to gradually change.

As noted above, the surface speed differential between the ink form roller and the plate cylinder should be predictable and consistent, because too small of a differential will not produce sufficient force to dislodge the hickeys, whereas too great of a differential could produce a smearing of the ink.

There is no teaching from Eltner which would remedy that problem, since Eltner, like Garner et al., does not directly drive an ink form roller, but rather drives a vibrating roller which frictionally drives the ink form roller. Thus, as in Garner et al. the ink form roller is acted upon by two frictional inputs. Hence, the shortcomings of Garner et al. would also apply to Eltner et al.

It is not seen how one skilled in the art could find it obvious to drive the ink form roller 17a of Garner et al. in view of Eltner's disclosure to drive a vibrating roller, since Gardner et al. also drives the ink form roller by a vibrating roller.

In sum, each of claims 1, 15 and 19 recites directly driving an ink form roller by a variable speed servo motor, whereas neither of the patents to Garner et al. and Eltner discloses such a feature. Hence, it is not understood how the claims could possibly be considered as obvious thereover.

In light of the foregoing, it is submitted that the application is in condition for allowance.

Respectfully submitted,

BUCHANAN INGERSOLL PC

Date: March 17, 2006

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